

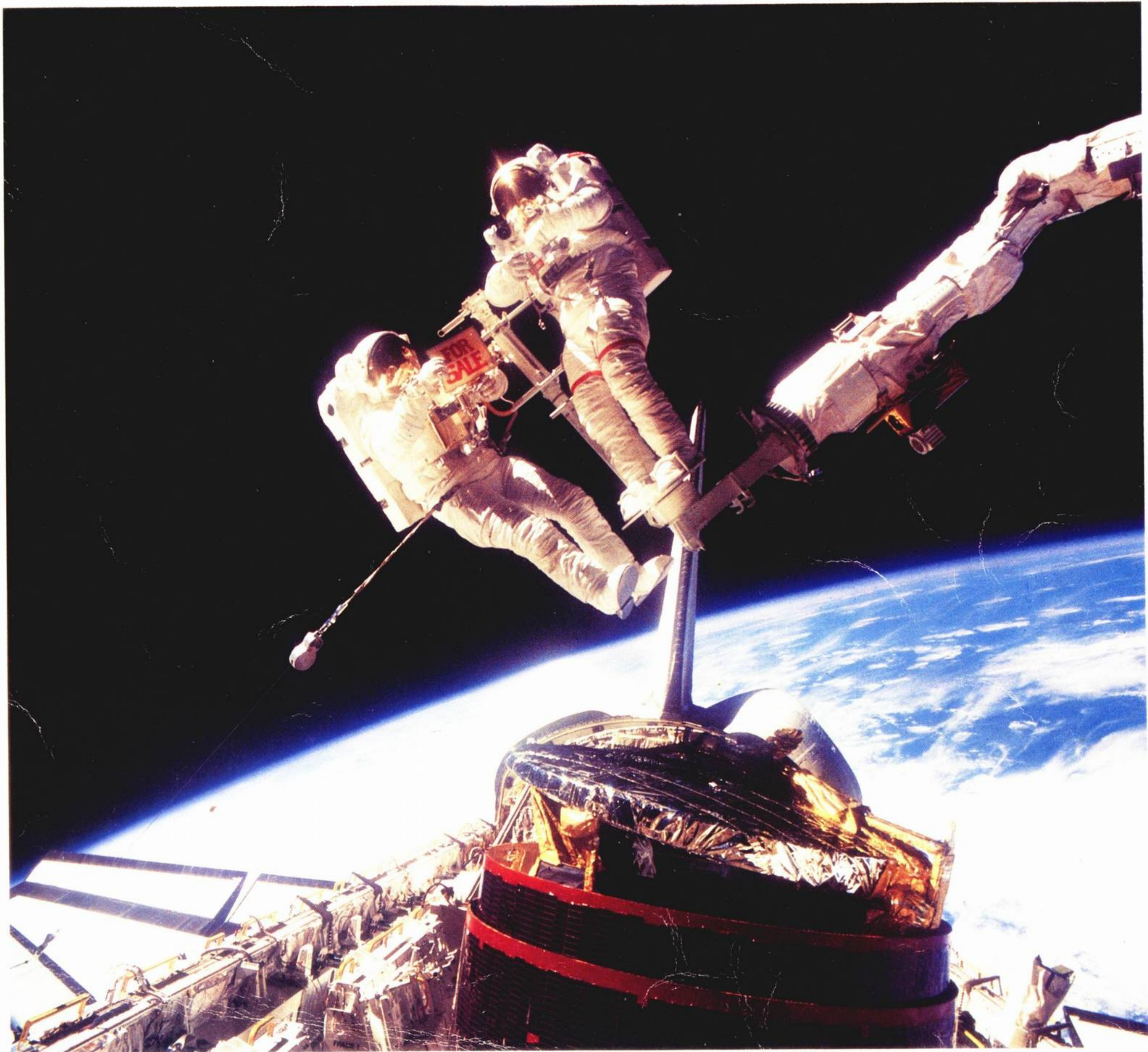




National Aeronautics and
Space Administration

STS-8 Night Launch

NASA's eighth Space Shuttle launch lights up the Florida sky at 2:32 a.m. (EDT), August 30, 1983. The *Challenger's* third flight is the first to have its beginning in darkness. Five astronauts and an assortment of experiments are aboard the reusable vehicle. Crew members are Astronauts Richard H. Truly, commander, Daniel C. Brandenstein, pilot; and Dale A. Gardner, Guion S. Bluford and William E. Thornton, all mission specialists.



**Mission 51-A Payload Bay —
History's First Space Salvage Mission**

Following retrieval of the WESTAR VI and PALAPA B-2 satellites, Astronaut Dale A. Gardner, left, holds a "For Sale" sign, making reference to the status of the recaptured communications spacecraft. Astronaut Joseph P. Allen stands on the mobile foot restraint which, in tandem with the Remote Manipulator System arm, served as a cherry-picker for capture efforts. Dr. Anna L. Fisher controlled the robot arm from inside the *Discovery's* cabin.

The PALAPA B-2 and the WESTAR VI satellites had been stranded since their initial deployments in February 1984. The failure of the Payload Assist Modules attached to the satellites put them into unusable low-Earth orbits, about 600 miles above the Earth.

In addition to deploying the two communications satellites, Anik D2 (TELESAT H) and LEASAT 1 (SYNCOM IV-1), Space Shuttle Mission 51-A included yet another "first" — the retrieval and return to Earth of two stranded satellites. The mission activities took on the coined phrases, "Two Up, Two Down" and "We deliver — we pick up."

The original retrieval plan called for an A-frame device to be attached to each errant satellite, and then they were to be lowered into the *Discovery's* payload bay. The device could not be used, resulting in Astronaut Joe Allen "manhandling" the satellites while Astronaut Dale Gardner attached an adapter in order to berth the satellites in the cargo bay.

Orchestration of the retrieval activities was done by Astronaut David M. Walker from inside the crew module. The mission was commanded by Astronaut Frederick (Rick) H. Hauck.